PUM v. Google

JOINT CLAIM CONSTRUCTION COMPARISON

Agreed Terms:

"*automatic*, personalized information services to the user"	'040 Patent: 1, 32	"without human intervention"
"central computer"	'040 Patent: 32	"computer on the server side of a client-server relationship"

Disputed Terms:[1]

Item #	Claim Term/Phrase	Claim(s)	P.U.M.'s Construction	Google's Construction
1	antecedent basis terms			
	"User u"/"the user" and "the user u"	'040 Patent: 1, 11, 21, 32	No construction necessary	"A user u" and "the user" / "the user u" refer to the same user.
	"user" / "the user"	'276 Patent: 1, 6, 21, 23	No construction necessary	"A user" and "the user" refer to the same user
	"user-specific data files" / "the user-specific data files"	'040 Patent: 1, 32	No construction necessary	"user-specific data files" and "the user-specific data files" refer to the same files
	"a document d" / "the document"	'040 Patent: 1, 11, 32	No construction necessary	"a document d" and "the document" refer to the same document.
	"a document" / "the document"	'276 Patent: 6	No construction necessary	"a document" and "the document" refer to the same document
	"a learning machine" / "the learning	'040 Patent: 1, 32	No construction necessary	"a learning machine" and "the learning machine" refer to the same

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[1] Though numbered herein, the parties have not necessarily addressed these terms in their opening briefs in this order.

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	"machine"			learning machine.
	"a user-specific learning machine" / "the user-specific learning machine"	'276 Patent: 1, 5, 23	No construction necessary	"a user-specific learning machine" and "the user-specific learning machine" refer to the same user-specific learning machine
	"a probability P(u|d) that an unseen document d is of interest to the user u"/ "the probability P(u|d)" / "the estimated probability"	'040 Patent: 1, 32	No construction necessary	"a probability P(u|d) that an unseen document d is of interest to the user u," "the probability P(u|d)," and "the estimated probability" refer to the same probability.
	"parameters of a learning machine" / "the parameters"	'040 Patent: 1, 32	No construction necessary	"parameters of a learning machine" and "the parameters" refer to the same parameters.
	"a user model" / "the user model"	'040 Patent: 1, 21, 32	No construction necessary	"a user model" and "the "user model" refer to the same user model.
	"a search query" / "the search query"	'276 Patent: 1, 21	No construction necessary	"a search query" and "the search query" refer to the same search query
2	order of steps	'040 Patent: 1, 32 '276 Patent: 1, 23	No construction necessary. If the Court is inclined to address the issue, then it should hold that the steps may be performed in a consecutive manner, in an overlapping manner, or a combination of the two, except that the documents must be analyzed (at least once) to identify properties (step (d) of claims 1 and 32	'040 Patent, 1 and 32: Steps (a), (b), and (c) must be performed in that order and before steps (e) and (f); step (d) must be performed before steps (e) and (f); and step (e) must be performed before step (f). '276 Patent, 1: steps (a), (b), and (c) in that order; step (d) before step (e); step (f) must be performed after steps (c) and (e); and step (g) must be performed after step (f).

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			of the '040 patent) before those identified properties are applied to the learning machine (step (e) of claims 1 and 32 of the '040 patent). And for claim 1 of the '276 patent, the search query is received (step (d)) before documents are retrieved based on the search query (step (e)), such that documents are retrieved before their identified properties can be applied to the user-specific learning machine to estimate a probability that the retrieved document is of interest to the user (portion of step (f)), and that the probability must be estimated before it can be used in step (g).	276 Patent, 23: step (a), (b), (c), (d), (e), and (f) in that order
3	"user" / "user [u]"	'040 patent: 1, 11, 21, 22, 32 '276 patent: 1, 3, 5, 6, 21, 23, 24	"a person operating a computer as represented by a tag or identifier"	"person operating a computer"
4	"user-specific data files"	'040 Patent: 1, 32	"the monitored user interactions with data and a set of documents associated with the user"	"data files unique to the user"

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	"monitored user interactions with data"	'040 Patent: 1, 32	"the collected information about the user's interactions with data"	"user interactions with data obtained from the monitoring step of 1(a)" "user interactions with data obtained from the monitoring step of 32(a)."
	"set of documents associated with the user"	'040 Patent: 1, 32	"a group or collection of text or other types of media associated with the user"	"group or collection of documents associated with the user"
5	"document"	Passim	"text or any type of media"	"an electronic file"
6	"estimating parameters of a learning machine"	040 Patent: 1, 32	"estimating values or weights of the variables of a learning machine"	"estimating a value or weight of each of the variables that are used by the learning machine to calculate a probability"
	"parameters of a learning machine"	'040 Patent: 1, 32	"values or weights of the variables of a learning machine"	"variables, having a value or weight, that are used by the learning machine to calculate a probability"
	"estimating parameters of a user specific learning machine"	'276 Patent: 1, 5, 23	"estimating values or weights of the variables of a user-specific learning machine"	"estimating a value or weight of each of the variables that are used by the user specific learning machine to calculate a probability"
	"parameters of a user specific learning machine"	'276 Patent: 1, 5, 23	"values or weights of the variables of a user-specific learning machine"	"variables, having a value or weight, that are used by the user-specific learning machine to

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				calculate a probability"
7	"learning machine"	'040 Patent: 1, 32	"a model and/or mathematical function that is used to make a prediction or intelligent decision that attempts to improve performance in part by altering the values/weights given to its variables depending upon past observations or experiences"	"program that contains parameters used to calculate a probability, and where the predictive ability of the program improves over time with the addition of new data."
	"user specific learning machine"	'276 Patent: 1, 5, 23	"a model and/or mathematical function that is used to make a prediction or intelligent decision that attempts to improve performance in part by altering the values/weights given to its variables depending upon past observations or experiences specific to the user"	"learning machine unique to the user"
	"User Model specific to the user"	'040 Patent: 1, 21, 32	"an implementation of a learning machine updated in part by data specific to the user"	"model unique to the user, that is created and updated by the learning machine and stored in a data structure"
8	"estimating a probability P(u|d) that an unseen document d is of interest to the user u"	'040 Patent: 1, 32	"approximating or roughly calculating the degree of belief or likelihood that an unseen document d is of interest to the user u given	"calculating the percentage chance that an unseen document d is of interest to the user u given the information that is known knowledge about the unseen

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			the information that is known about the unseen document	document."
	"probability P(u|d)"	'040 Patent: 1, 32	See construction for "estimating a probability P(u|d) that an unseen document d is of interest to the user u"	See construction for "estimating a probability P(u|d) that an unseen document d is of interest to the user u"
	"estimating a posterior probability P(u|d,q) that a document d is of interest to the user u given a query q submitted by the user"	'040 Patent: 11	"approximating or roughly calculating the degree of belief or likelihood that a document d is of interest to the user u given the information that is known about the document, and given a query q"	"calculating the percentage chance of the user u being interested, taking into account what is previously known about that user's interests in general, given new knowledge of the document d the user is considering and a search query q submitted by the user."
	"[posterior probability] P(u|d,q)"	'040 Patent: 11	See construction for "estimating a posterior probability P(u|d,q) that the document d is of interest to the user u given a query q submitted by the user".	See construction for "estimating a posterior probability P(u|d,q) that a document d is of interest to the user u given a query q submitted by the user"
	"probability"	'040 Patent: 1, 11, 32 '276 Patent: 1, 21, 23	"the degree of belief or likelihood"	"percentage chance"
9	"unseen document"	'040 Patent: 1; 32	"document not previously seen by the user"	"document not previously seen by any user"
10	"documents of interest to the user" / "documents [that are] not of interest to the user"	'276 patent: 1, 5, 14, 21, 23	"text or media for which the user has a positive response" / "text or media for which the user has a	Indefinite

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			negative response or has ignored"	
11	"present" or "presenting"	'276 Patent: 1, 21, 23	"to provide or make available"	"display[ing]"
12	"user interest information derived from the User Model"	'040 Patent: 21	"interests or other information inferred from the User Model"	Indefinite